

## ABSTRACT

An acoustic touchscreen having a substrate capable of propagating acoustic waves, the substrate having a touch-sensitive area, and an array of acoustically reflective elements lying in or on the substrate are positioned to transmit or receive acoustic signals  
5 into or out of the touch-sensitive area, the elements having a focusing shape that provides waveguide functionality, i.e., focusing the acoustic wave energy to a narrow area along a center line of the array axis, without requiring a further waveguide core structure.